# AMENDMENTS TO THE CLAIMS

Claims 1-3. (Canceled)

4.  (Previously presented) A method of estimating the position of the AC or PC landmarks which includes:

(a) using a midsagittal radiological image to estimate the position of the AC or PC landmarks in the midsagittal plane;

(b) using the estimated position of the AC or PC landmarks to generate a plurality of radiological images relating to different slices, including a first image of a slice including the estimated position of the AC or PC landmark and second images of neighboring slices; and

(c) analysing the radiological images to improve the estimate of the position of the AC or PC landmarks;

wherein the plurality of generated radiological images are axial images relating to different axial slices including a first axial image of an axial slice containing the estimates of the position of the AC or PC landmark, and second axial images of neighboring axial slices and the method further includes:

using the estimated position of the AC or PC landmark obtained from the midsagittal radiological image to generate a plurality of coronal images relating to different coronal slices, including a first coronal image of a coronal slice including the estimated position of the AC or PC landmark and second coronal images of neighboring coronal slices, the neighboring coronal slices in the second coronal images being in the same orientation as the coronal slice in the first coronal image;

analysing the coronal images to improve the estimate of the position of the AC or PC landmark obtained from the midsagittal radiological image; and

further improving the estimate of the position of the AC or PC landmark using the improved estimates of the position of the AC or PC landmark obtained from analysing the axial images and the coronal images.

5.      (Currently amended) A method according to claim 4 in which ~~the images are axial images, and~~ step (c) includes deriving a mean ventricular line (MVL), and determining the position of the AC or PC landmarks by scanning intensity values along the MVL.

6.      (Currently amended) A method according to claim 5 in which ~~the images are axial images relating to different axial slices including a first axial image of an axial slice containing the estimates of the position of the AC or PC landmarks, and second images of neighbouring axial slices,~~ the method further includ<u>es</u>~~ing~~ the steps of determining dimensions of the AC or PC landmarks using the second <u>axial</u> images.

7.      (Currently amended) A method according to claim 4 in which ~~the images are coronal images, and step (c)~~ <u>the step of analysing the coronal images to improve the estimate of the position of the AC or PC landmark obtained from the midsagittal radiological image further</u> includes deriving a symmetry line within a<u>the</u> first coronal image including estimates of the position of the AC or PC landmarks, and determining the position of the landmark by scanning intensity values along the symmetry line.

8.      (Currently amended) A method according to claim 7 in which ~~the images are coronal images relating to different coronal slices including second images of coronal slices neighbouring the first coronal slice,~~ the method further includ<u>es</u>~~ing~~ the step of determining dimensions of the AC or PC landmarks using the second <u>coronal</u> images.

9.      (Previously presented) A method according to claim 4 in which the landmark is the AC.

10.     (Previously presented) A method according to claim 4 in which the landmark is the PC.

11. (Previously presented) A method according to claim 4 in which step (a) is performed by a method of estimating the position of a brain landmark which includes:

(i) defining at least one initial threshold value;

(ii) determining whether a region of a midsagittal radiological image including a brain structure includes a group of pixels having intensity values in a range defined by the initial threshold value and which obey one or more predefined geometrical criteria describing the structure;

(iii) if not, then at least once modifying the threshold value and performing step (ii) again;

(iv) if so, identifying the group of identified pixels as the structure; and

(v) generating a first estimate of the position of the landmark as a point on the identified structure wherein the structure is the fornix, and the landmark is the anterior commissure (AC).

12. (Canceled)

13. (Previously presented) A non-transitory computer-readable medium storing a computer program product including program instructions which are readable by a computer and cause the computer to perform a method as defined by claim 4.